ArcDIB v2.1 Help

Welcome to ArcDIB from Better Maps. This application is designed to provide a tool for storing and organizing graphical images.

NOTE: Version 2.1 is now capable of handling Image data, Sound data, Video data, and OLE objects. Throughout this Help File, the term Image is intended to represent an "Image Object" in the sense that you're usually looking at something. Even though it is possible to import and store only a sound file, we refer to that object as an image - a sound image...if you will.

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Running - Quick Start

The main menu of ArcDIB consists of a window with a pulldown menu. From the pulldown menu, you typically either create or open an image database. The default filename for this database has an extension of .BIF.

Once the database is opened, the main dialog appears which contains all of the functions available to manage your images.

The following steps outline a typical session:

1. Select NEW from the pulldown menu of the the main window. A file dialog box will appear in which you type in the name of the database. (The default extension is .BIF)

2. Once the database is created, select IMPORT. Another file dialog box will appear from which you can select the image that you wish to import.

3. When the image is selected, it will appear in the view window in the upper left portion of the main dialog. The image will be proportionally resized to fit if necessary.

4. You may view the image in its full resolution by selecting the FULL WIN (Full Resolution Window) button.

5. To insert the image into the database, you must select the SAVE button.

6. A Compression Type Options dialog box will appear from which you select the compression method (if any) to apply to the data contained in the image prior to being stored in the database.

7. The image will remain displayed until you either import another file or CLOSE the database.

8. A thumbnail representation of the image will be immediately inserted into the Images List Box at the right of the screen. If you selected to compress the image data, the list entry will reflect its progress by displaying working... Once the image has been compressed and inserted into the database, the list label will show the method an relative percentage of space saved.

9. To view an image already saved in the database, select it from the list and either double-click the mouse or push the SHOW button. The image will be decompressed (if necessary) and redisplayed in the View Window. Information regarding the image is also displayed in the Image Info Area in the upper right corner of the screen.

10. To leave ArcDIB, select the CLOSE button.

Import

The Import function is the primary means by which you add images to your database.

Selecting it causes a "common file dialog box" to be displayed from which you select an image to import. At the bottom of the file box you may filter the search for specific formats by selecting the file type from the list of supported image formats.

Export

The EXPORT function provides a means to save individual images stored in ArcDIB to an external DOS file.

Selecting this function displays a file dialog box in which you select the type of image to export and the filename of the image.

Show

The SHOW function is used to extract and display the currently selected image in the Image List Box.

Upon selecting this button, the image will be decompressed (if necessary) and displayed in the View Window. The image statistics will also be displayed in the Image Info Box.

Video

The VIDEO function will play the current Microsoft Video for Windows (MVW) file displayed in the Video Window.

The video function will only play in you have the runtime MVW drivers installed.

The installation disk for ArcDIB contains the necessary files to install MVW runtime. You may use it to reinstall MVW at anytime without having to reinstall ArcDIB by choosing to restart Windows after the MVW setup program has completed.

Please read the MVW terms in the file MVWTERMS.TXT before installing MVW.

Play

The PLAY function will attempt to playback any sound data that you have recorded via the RECORDfunction.

You must have some type of sound driver present in order to hear the recorded sound. The installation disk contains a software driver provided by Microsoft that will emulate a true device such as the Sound Blaster Card.

The sample database (SAMPLE.BIF) contains images with sound attached. The Image List Box denotes this attribute with a mini "Play" icon next to the image thumbnail.

Record

The RECORD function provide a way to attach sound to an image.

In order to use this function you must have some type of device capable of creating .WAV files (ie Sound Blaster).

A dialog box will appear which allows you to control the recording and optionally playback or delete to current audio.

The sample database (SAMPLE.BIF) contains images with sound attached. The Image List Box denotes this attribute with a mini PLAYicon next to the image thumbnail

Full Win

The FULL WIN function will display the current image in a separate scrollable window in its full resolution.

The Full Resolution Window contains its own pulldown menu which contains various image manipulation functions.

Video "images" (or clips) will be displayed in their own host window from which you may configure its operation.

OLE objects will activate their "primary verb" when the FULL WIN button is pressed. For instance, a PaintBrush picture will activate the PAINT.EXE (OLE server) program.

Print

The PRINT function will enable you to print the current image in one of several layouts:

Full Page

Half Page

Centered

You may also "draw" a rubberband-type box in the Print Layout area to designate where you want the image to be placed on paper.

The "Print Thumbnail Catalog" will send a List Box representation of all images in the database to the printer (with notes).

Save

The SAVE function will insert a new image into the database or update an existing image if it has changed.

If the image does not exist in the database you will be prompted to select a Compression Method .If the image exists, any information that has changed will be updated.

Delete

The DELETE function deletes the currently selected item IN THE IMAGE LIST BOX from the database

If the image you are deleting is also displayed, it remains displayed.

Search

The SEARCH function lets you scan the <u>Notes</u>of all images in the database for a specific word or string of characters.

The Search Dialog Box prompts you for the search string and to optionally consider the "case" of the string.

If the search is successful you are given the opportunity to <u>Show</u>that image or continue the search.

If more than one image meets the search criteria, you may scan back and forth among the "found" images using the PREV and NEXT buttons.

Compression

When images are inserted into the database, you have four (4) choices of how to treat the data:

1. LZW - This is a "lossless" algorithm (way of doing something) which compresses data by symbolically encoding the redundancy in it. Depending on the type of image, a different flavor of LZW may be implemented to take advantage of the specific characteristics. "Lossless" means that all original data is restored when the image is decompressed.

2. JPEG - This is a "lossy" algorithm which is useful for archiving 8 and 24-bit images. "Lossy" means that some of the original data in the image is actually disgarded in order to achieve high compression ratios. These types of algorithms take advantage of the fact that some of the data in a "real" image can not actually be seen anyway. This is particularly true with 24-bit images. The JPEG factor controls the degree of loss you are willing to accept in an image. The default is 3 which produces a reasonable compromise between image quality and compression performance.

3. NONE - ...you guessed it.

4. Custom - You can link in your own compression algorithm via a Dynamic Link Library (DLL) written in the language of your choice. Sample source code has been provided to illustrate the basis requirements. For more information contact Tech Support

Compression Status

The Compression Status Dialog Box displays the current state of the compression queue maintained by ArcDIB.

When you Import. and Save. and image in the database, you are are prompted select an Compression method. (or NONE). If you elect to compress the image, the image object is then added to a queue of images waiting to be compressed. Since the compression process occurs in the Background. you may continue using ArcDIB (or any other application) without delay.

The dialog box controls not only display information about the current state of the queue, but also provide the ability to manage it via the Abort, Delete. and Delete ALLcontrols.

The Total Compression Bar displays the aggregate disk space savings attained via compression.

Abort Compression

When you select the ABORT button in the Compression Status Dialog, you are prompted for confirmation. If you select YES, the current image is deleted from the queue and the compression process is suspended until you restart it by pressing the button again.

Queue Delete

When you select DELETE from the Compression Status Dialog, the selected image in the queue is removed.

Queue Delete All

When you select DELETEALL from the Compression Status Dialog, all images in the queue are removed.

Background compression

All image data compression is accomplished as a "background" task in ArcDIB. This allows the user to continue working in the application without having to wait for compression to finish. With large files this can sometimes seem like an enternity.

It is worth noting, however, that running a task in the "background" on a PC really means that you are sharing the CPU with that task. Normally, one or more tasks can coexist in Windows very nicely. The trouble comes when both tasks have heavy requirements for processing time. Compression, by its very nature, is extremely CPU intensive - it wants ALL of your computer ALL the time! ArcDIB attempts to balance this demand with the (typically) much more easy-going, fat, dumb and happy user interface. While every attempt has been made to keep the compression process as transparent as possible, you may notice a slight degradation in responsiveness while processing certain images. Unfortunately, the more responsive you make the interface, the longer it takes to empty that compression queue.

Notes

The NOTES edit control lets enter up to 4k (4000 chars) of textual information to store with the image object.

The information in the Notes can be used for locating an image via Search function.

OLE

ArcDIB supports OLE as a client. This means that it can access objects such as Bitmaps or WAV devices from applications that provide them like PaintBrush and Media Player.

Normally, in order to import an OLE object into ArcDIB, it has to first be made available by the sever application. When you select the OLE button, ArcDIB will determine if there is anything available. If so, you may choose to either Paste or Paste Link the object.

Once the OLE object is imported, an image representing it will be displayed in the View Window. To activate the "primary verb" of the object (or call the server application) either click on the object itself or select the "FULL WIN" function.

JPEG compression is not permitted with OLE objects, even if they are bitmaps. When the object is saved in the database, its icon (or thumb nail) is the same as the familiar Object Packager.

You can also Export an OLE object to a disk file the same as you would with any other image. This is handy for later retreival via the Import function. The OLE objects must have a .OLE file extension.

Drag-n-Drop Import

ArcDIB supports Drag-n-Drop functionality for importing images.

To accomplish this, simply "Drag" a file (or files) from another application (such as File Manager) over to the ArcDIB's main screen and then "Drop" the file(s).

A list box will appear containing the file(s) that were dropped. Pressing OK will initiate a Batch Import of all files listed. To abort the operation, press Cancel.

When the Batch Import operation begins, you will again be asked to confirm importing the number of files selected. After confirmation, the files are inserted into the compression queue. Before the first file is compressed, you will be prompted to select the compression method to be applied to all files. Once this is done, the files are compressed and inserted into the database.

You may use the Drag-n-Drop feature with only the minimized icon of ArcDIB displayed as long as a *.BIF database is currently open.
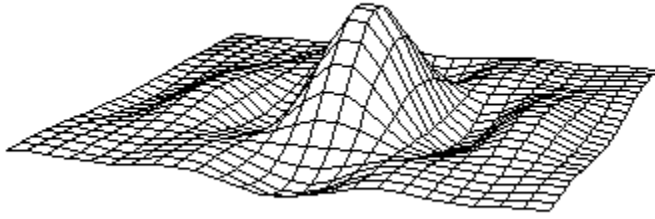
Slidebar

The Slide Bar at the upper righthand corner of the View Window is used for two purposes:

1. To move among pages of a multi-page image such as a FAX.
2. To advance or reverse a video clip on a frame-by-frame basis

The current and total pages/frames are displayed above the Slide Bar.

Technical Support

Image Technical Support: Better Maps
Program Support: Better Maps Software
920 Sycamore Ave #49
Vista, Ca. 92083
(619) 598-1323 voice/FAX

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Hints and Tips

ArcDIB can be used for many different purposes. We developed it out of a need to efficiently store large bitmap files derived from map data. Some users take advantage of the variety of supported file formats for conversion purposes. We see the greatest virture in the fact that it can collect and organize data from different sources and media tpyes.

Use the Full Resolution. window as a scratchpad for image conversions. It offers several useful functions such as a JPEG preview its own Export utility.

Video files tend to be difficult to compress since they may actually may have been created in a compressed form.

Known Bugs

Previous versions of the ArcDIB database format (.bmf) are not supported in this release. If you have databases which you wish to be converted, please contact Tech Support and request a the conversion package. Future releases will provide full backward compatibility with all versions.

WordPerfect (.WPG) files containing vector information is not currently supported.

Selecting "Include Subdirectories" will fail if the file mask is not a valid filter (ie *.bmp;*.dib). This happens when a file is selected and then the directory is changed.

Please forward any questions or bug reports to Technical Support

Version History

The following is a synopsis of changes implemented in each revision of ArcDIB.

v2.0   - 5/17/93
- Initial conversion from ArcDIB.

v2.01 (beta) - 5/28/93
- Corrected various spelling errors (sory).

v2.02 (beta) - 6/5/93
- Fixed Import File Dialog to support more than 8 multiple selections a time.
- Enhanced Import File Dialog to optionally include subdirectories in the file list.
- Enhanced Import File Dialog to provide file statistics and optional image preview.
- Enhanced Import File Dialog to drop list of available formats statically
- Enhanced Import File Dialog to include ALL FORMATS
- Included support for .EPS format
- Included progress window when opening large databases (> 10 records) - Rearranged main window interface layout to increase number of viewable thumbnail images.
- Included Clipboard Paste feature via OLE function
- Fixed Batch Mode Import bug which crashed system if resources were low.
- Fixed About Box bug which did not restore GDI resources after display.
- Adjusted import filter logic to attempt to more properly discriminate between valid image formats and corrupted files.
- Adjusted System Palette Realization logic to prevent unecessary remaps.
- Fixed Multi-Page TIFF and FAX handling.
- Included Radiobutton sort criteria for thumbnail list box.
- Allow Main Dialog Window to be minimized.

v2.03 (beta) - 6/6/93
- Adjusted position of COMMDLG Import Dlg Box controls
- Corrected bug in Import Utility that did not use the current format filter when scanning subdirectories.
- Corrected bug in OLE function that imported "blank" ole object even after operation was aborted (cancelled).
- Implemented "availability" logic w/respect to OLE function enabling/disabling.
- Corrected FULL WIN "Export" function which had been temporarily routed through to the Clipboard.
- Included prompt to warn that changes must be "Exported" in FULL WIN mode.

v2.04 (beta) - 6/7/93
- Separate "thread" implemented to handle Batch Imports. - Logic added to handle low disk, memory, resources encountered during Batch Import. - Icon attached to Main Dialog when minimized. - Zip code in Help File corrected. - Additional Logic added to prevent Recording Sound w/o proper device hardware installed.

v2.05 (beta) - 6/8/93
- Corrected Thumbnail List Box "auto ordering" when new image inserted - Corrected Metafile Import function to read .WMF's larger then 64K - Implemented support for "Drag-n-Drop" Importing of images.

v2.06 (beta) - 6/11/93
- Support for a variety of vector graphics added.

v2.07 (beta) - 6/12/93

- Corrected LZW compression bug "Can't rename..."
- Correct LZW decompress bug that did not free all file handles.
- Modified LoadLibrary logic to enhance performance.
- Corrected spell error in Import Dialog (GGM->CGM).
- Modified "Preview" in Import Dialog to accept vector formats.
- Corrected temp file housekeeping WRT icon files.

v2.11   - 6/18/93
- Corrected default drive logic to never assume floppy.

v2.12   - 6/18/93
- Corrected Drag-n-Drop bug that produced "Invalid Window" App error.

Please forward any questions or bug reports to Technical Support

ArcDIB v2.1 Registration

To register your copy of ArcDIB please print this file, fill it out, and send it with $28 per copy to:

BETTER MAPS SOFTWARE
 920 Sycamore Ave #49
Vista, Ca. 92083

*CA residents please include applicable sales tax.

Name:_____

Company:_____

Title:_____

Address:_____

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Phone:_____

FAX:_____

Disk format: ( ) 5 1/4   ( ) 3 1/2

Where did you hear about ArcDIB?:

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Comments:

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